

May 27, 2003

RE: B.P PRODUCTS 089-16960-00453

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision - Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures

May 27, 2003

Natalie R. Grimmer
BP Products North America, Inc.
P.O. Box 710
Whiting, IN 46394-0710

Re: Exempt Construction and Operation Status
089-16960-00453

Dear Ms. Grimmer:

BP Products North America, Inc. submitted a Part 70 operation permit application for a petroleum refinery located at 2815 Indianapolis Blvd., Whiting, IN 46394-2197. An application to modify the source was received on March 24, 2003. The application was made to add the following emission control devices to the refinery's Fluidized Bed Incinerator (FBI):

- (a) One (1) wet electrostatic precipitator (WESP).
- (b) One (1) carbon bed absorber.

Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the changes are classified as exempt from air pollution permit requirements. The following conditions shall be applicable:

1. Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
 - (a) Opacity shall not exceed an average of twenty percent (20%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
2. Pursuant to 326 IAC 6-1-10.1 (Lake County PM₁₀ Emission Limitations), PM₁₀ emissions from the FBI shall not exceed 0.173 pounds per ton based on 79,000 lbs/hr fluidizing air flow, and 6.84 pounds per hour.
3. Pursuant to 326 IAC 7-4-1.1(c) (Lake County Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the FBI shall not exceed 0.05 pounds per ton of feed material.
4. Pursuant to 326 IAC 20-28 (Hazardous Waste Combustors) and 40 CFR 63.1206(a) (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Hazardous Waste Combustors), the FBI must comply with applicable NESHAP Subpart EEE requirements on and after September 30, 2003.

This approval will be incorporated into the pending Part 70 permit application, 089-6741-00453.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Allen R. Davidson at (800) 451-6027, press 0 and ask for extension 3-5693, or dial (317) 233-5693.

Sincerely,

Original Signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
ARD

cc: File - Lake County
U.S. EPA, Region V
Lake County Health Department
IDEM - Northwest Regional Office
Air Compliance Section Inspector - Ramesh Tejuja
Compliance Data Section - Karen Nowak
Administrative and Development
Technical Support and Modeling - Michele Boner

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name:	BP Products North America, Inc. (f/k/a Amoco Oil Company - Whiting Refinery)
Source Location:	2815 Indianapolis Blvd., Whiting, IN 46394-2197
County:	Lake
SIC Code:	2911
Application No.:	089-16960-00453
Permit Reviewer:	Allen R. Davidson

On March 24, 2003, the Office of Air Quality (OAQ) received an application from BP Products North America, Inc. relating to the addition of emission control equipment for the Fluidized Bed Incinerator. The additional equipment includes a wet electrostatic precipitator (WESP) and a carbon bed.

History

Amoco Oil Company - Whiting Refinery submitted a Part 70 permit application for a petroleum refinery on September 30, 1996. This application shall be incorporated in the submitted Part 70 application.

The pending Part 70 application has since received the following revisions:

- (a) Exemption 089-8275-00003, which involved replacing storage tank #3531, was issued on April 30, 1997.
- (b) Exemption 089-9003-00003, which approved one (1) natural gas-fired hot oil heater rated at 12 million Btu per hour and identified as AHE-1200, was issued on November 19, 1997.
- (c) Minor Source Modification 089-11960-00003, which involved replacing storage tank #3705, was issued on June 6, 2000.
- (d) Minor Source Modification 089-11984-00003, which acknowledged removal of the Lubes Unit for an emission reduction credit, was issued on July 20, 2000.
- (e) Minor Source Modification 089-14239-00003, which involved a steam sharing plan with Whiting Clean Energy, was issued on May 11, 2001.
- (f) Significant Source Modification 089-13846-00003, which involved an additional tail gas unit at its Sulfur Recovery Unit, was issued on June 27, 2001.
- (g) Exemption 089-14450-00003, which involved changes to the operation of the #12 Pipe Still and an additional tower for the VRU 300 Merox Treating Section, was issued on July 18, 2001.
- (h) Significant Source Modification 089-14210-00453, which involved the addition of two (2) soil remediation units at the south tank field, was issued on September 13, 2001. This modification is also an Emission Offset Permit pursuant to 326 IAC 2-3.
- (i) Significant Source Modification 089-14630-00003, which involved changes at the Catalytic Feed Hydrotreating Unit (CFHU) to increase the rated capacity to 100,000

barrels per day, was issued on November 30, 2001. This modification also made the requirements of Exemption 089-14450-00003 federally enforceable.

- (j) Administrative Amendment 089-15525-00003, which amended Significant Source Modification 089-13846-00003 to include a modular degassing unit to eliminate sulfur pit emissions and to change permit language to more closely follow the New Source Performance Standards Subpart J, was issued on April 15, 2002.
- (k) Significant Permit Modification 189-15202-00003, which eliminates fuel oil usage at all heaters and boilers on or before June 1, 2003, subjects fuel gas usage to the New Source Performance Standards (NSPS) Subpart J, and subjects the two Fluidized Catalytic Cracking Units FCU 500 and FCU 600 to carbon monoxide limits, was issued on April 24, 2002. It modified Significant Source Modification 089-14630-00003.
- (l) Significant Source Modification 089-15500-00003, which adds selective catalytic reduction (SCR) emission control to Fluidized Catalytic Cracking Unit #600 (FCU 600), was issued on October 18, 2002. It further modified Significant Source Modification 089-14630-00003.
- (m) Minor Source Modification 089-16586-00003, which allowed installation of nitrogen oxide (NO_x) emission controls onto the five (5) boilers at the #3 Stanolind Power Station, was issued on January 30, 2003. It further modified Significant Source Modification 089-14630-00003.
- (n) Minor Permit Modification 089-14630-00003, which incorporates the requirements of Construction Permit Modification 089-9931-00003 into Significant Source Modification 089-14630-00003, was issued on May 14, 2003. (Construction Permit Modification 089-9931-00003, issued on February 19, 1999, allowed an increase in fuel firing capacity for the Distillate Desulfurization Unit (DDU) Process Heater WB-302.)

This application is the fifteenth revision to the Part 70 permit application. It is being sought to comply with new rules regarding hazardous waste combustors which will take effect on September 30, 2003.

Enforcement Issues

OAQ is aware of a consent decree between BP Exploration & Oil Company, Amoco Oil Company, and Atlantic Richfield Company, and the U.S. EPA and nine states including Indiana. However, the proposed changes are not related to the consent decree.

Stack Summary

Stack information will be unchanged as a result of this application.

Recommendation

The staff recommends to the Commissioner that the application be approved as an exemption. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on March 24, 2003.

Emission Calculations

There are no emissions calculations associated with this application. Emissions are expected to decrease as a result of this application. However, the amount of the decrease has not been quantified by OAQ at this time.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

The following table reflects the existing source potential to emit. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit:

Pollutant	Potential To Emit (tons/year)
PM	4,900
PM-10	4,900
SO ₂	15,000
VOC	5,500
CO	361,800
NO _x	10,200

HAP's	Potential To Emit (tons/year)
Single	>10
TOTAL	>25

The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of criteria pollutants is equal to or greater than 100 tons per year. The potential to emit a single hazardous air pollutant (HAP) is equal to or greater than ten (10) tons per year and the potential to emit a combination of HAP is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

This existing source is a major source for Prevention of Significant Deterioration, 326 IAC 2-2. It is in one of the 28 source categories and pollutants have the potential to emit at a rate of 100 tons per year or more.

The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of criteria pollutants is equal to or greater than 100 tons per year. The potential to emit a single hazardous air pollutant (HAP) is equal to or greater than ten (10) tons per year and the potential to emit a combination of HAP is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

This existing source is a major source for Prevention of Significant Deterioration, 326 IAC 2-2. It is in one of the 28 source categories and pollutants have the potential to emit at a rate of 100 tons per year or more.

The revision's potential to emit is as follows:

Pollutant	Potential To Emit (tons/year)
PM	0.0
PM-10	0.0
SO ₂	0.0
VOC	0.0
CO	0.0
NO _x	0.0

HAPs	Potential To Emit (tons/year)
TOTAL	negligible

The potential to emit (as defined in 326 IAC 2-7-1(29)) will not change as a result of this application. Therefore, the application does not require review under 326 IAC 2-7-10.5(d)(10) and can be classified as exempt under 326 IAC 2-1.1-3.

This application is not a major modification for Emission Offset, 326 IAC 2-3, or Prevention of Significant Deterioration (PSD), 326 IAC 2-2 because the increase in potential to emit every attainment pollutant is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, 326 IAC 2-3, and 40 CFR 52.21, the PSD and Emission Offset requirements do not apply.

County Attainment Status

The source is located in Lake County:

Pollutant	Status
PM-10	nonattainment (moderate)
SO ₂	nonattainment (primary)
NO ₂	attainment
Ozone	nonattainment (severe)
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as nonattainment for ozone. VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

Lake County has also been classified as non-attainment for sulfur dioxide (SO₂) and particulate matter less than 10 microns in diameter (PM-10). Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

Lake County has been classified as attainment for carbon monoxide (CO) and oxides of nitrogen (NO_x). Therefore, CO and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Federal Rule Applicability

There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source. Subparts Ea and Eb are not applicable since the incinerator does not process municipal waste. The incinerator predates the applicability of Subpart Ec.

On and after September 30, 2003, the incinerator will be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Hazardous Waste Combustors, 326 IAC 20-28 (40 CFR 63, Subpart EEE).

When the applicant submits the Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(d), the operating requirements specified in the Notification of Compliance will be incorporated in the Part 70 permit pursuant to 40 CFR 63.1206(c)(1)(v).

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of pollutants specified in the rule. Pursuant to this rule, the source must annually submit an emission statement for the source. The annual statement must contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

- (a) Opacity shall not exceed an average of twenty percent (20%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Fluidized Bed Incinerator (FBI)

326 IAC 4-2 (Incinerators)

Pursuant to 4-2-1(b)(2)(F), this facility will be exempt from 326 IAC 4-2 since 40 CFR 63 Subpart EEE will be applicable.

326 IAC 6-1-10.1 (Lake County PM₁₀ Emission Limitations)

Pursuant to 326 IAC 6-1-10.1, PM₁₀ emissions from this facility shall not exceed 0.173 pounds per ton based on 79,000 lbs/hr fluidizing air flow, and 6.84 pounds per hour.

326 IAC 7-4-1.1 (Lake County Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-4-1.1(c), sulfur dioxide emissions from this facility shall not exceed 0.05 pounds per ton of feed material.

Conclusion

The construction and operation of the two control devices shall be subject to the conditions of the attached exemption, No. 089-16960-00453.